



U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Electricity Advisory Committee

Smart Grid Subcommittee Work Plan Status

Joe Paladino - DOE

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Committee Chair**

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2012 Smart Grid Work Plan Approach

- **Considerations:**

- Build from resulting from ARRA SGIG/SGDP project results that were awarded ~two years ago
- EAC Smart Grid Sub-Committee role defined in the 2007 Energy Independence and Security Act

- **Approach:**

- Met with DOE in January 2012, May 2012
- Conference calls and iterations with Committee and DOE staff
- Participated in Peer Review
- Build upon DOE activity underway

- **Philosophy:**

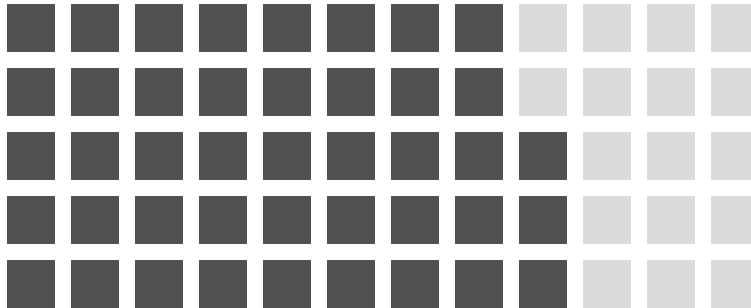
- Work closely with DOE staff to find ways for EAC to add value
- User priorities to focus efforts throughout 2012

Major Investment is Anticipated

**SGIG
Spending**

**\$7.9 billion with cost share to
be spent through 2015**

**EPRI
Estimate**



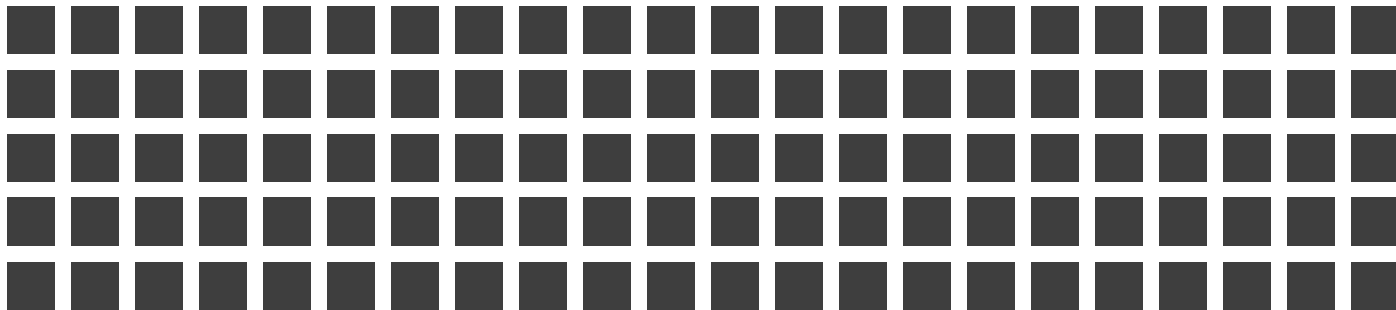
EPRI. Estimating the costs and benefits of the smart grid: A preliminary estimate of the investment requirements and the resultant benefits of a fully functioning smart grid. EPRI, Palo Alto, CA; 2011.

**Adoption Rate
Factors:**

- Economy
- Policy
- Technology
- Consumer Acceptance
- Reliability Needs

**\$338 - \$476 billion
needed through 2030**

**Brattle
Group
Estimate**



Chupka, M.W. Earle, R., Fox-Penner, P., Hledik, R. Transforming America's power industry: The investment challenge 2010 – 2030. Edison Electric Institute, Washington D.C., 2008.

2012 Smart Grid Work Plan Overview

- **Prioritized Work Plan Overview:**

1. Review ARRA SGIG/SGDP project lessons and benefits and develop forward-looking recommendations to guide actions that promotes SG investment



2. Map a communication outreach framework. Use ARRA SGIG/SGDP project findings for messaging



3. Develop Smart Grid Education Materials

- DOE will present the ARRA SGIG/SGDP project lessons
- Solicit input on Smart Grid education needs
- Map outline in 2012 that guides a future multi-year deliverable

Smart Grid White Paper - Objectives

- Objectives are to recommend a two-way outreach strategy leveraging findings from ARRA/SGIP/SGDP projects:
 - Informing on the value proposition revealed from smart grid activities to date
 - Obtaining feedback from stakeholders on gaps
 - Connect smart grid to broader reliability and sustainability infrastructure goals
- Brief overview of the projects

Smart Grid White Paper - Gaps

- Review and gap analysis
 - Assessment of current outreach strategy
 - Identify improvements
- Assess efforts to promote end-use consumer acceptance
- Identify obstacles to broader deployment
- Identify gaps in DOE research and educational efforts
- Provide a summary and recommendations

Smart Grid White Paper - Key Recommendations

- Preliminary recommendations for DOE:
 - Focus on value propositions with near-term emphasis on reliability benefit and improvements to operational efficiency
 - Develop formal dialog with NARUC and other key stakeholders at the national level. Document its Smart Grid communications plan, including the following elements;
 - Education strategy, including knowledge transfer
 - Value based messaging, including messaging for consumers
 - Institute specific industry focus groups for input, forward looking dialog and outreach
 - Describe the DOE R&D and Education Roadmap for Smart Grid over the next 5 years, including resource allocation and funding

Challenges

- Having time review and understand projects that are underway
- Limited resources to research and write report
- Announce best practices and successes in parallel with developing the Outreach strategy
- Connect activity to sustainability and national objectives
- Transfer messaging from technology-based to benefit-based and make it proactive
- Identify communication partners
- Establishing systematic processes to collect gaps and successes from projects and use them to improve

Next Steps

- **Next Steps:**
 - Refine recommendations
 - Meet with NARUC
 - Create outreach plan
 - Identify near-term opportunities for success sharing
 - Expand focus group role to collect info, gaps and test messages
 - Add members and sub-divide responsibilities
 - Continue monthly conference calls
 - Write report